



**Texas Commission on
Environmental Quality**
Austin, Texas

PRODUCTION AREA AUTHORIZATION 3

Mine: Kingsville Dome
Production Area: UR02827-031

TCEQ Docket No. 1997-1063-UIC
TCEQ Docket No. 2004-0746-UIC

AUTHORIZATION to conduct underground
injection under provisions of
Permit No. UR02827-001

I. Name of Permittee:

- A. Name: URI, Inc.
B. Address: 650 S. Edmonds Lane, Suite 108
Lewisville, TX 75067

II. Name of Mine: Kingsville Dome

III. Standard Provisions:

A. Restoration Table (Attachment A)

When mining of the production area (PA) is completed, the permittee shall proceed to reestablish groundwater quality in the mine area aquifer to a level consistent with the values listed in the Restoration Table in Attachment A. When restoration begins, the permittee shall notify the executive director.

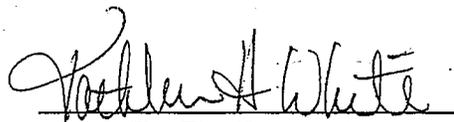
B. Control Parameter Upper Limits Table (Attachment B)

If the results of routine sample analysis from a designated monitor well show that the value of any control parameter is equal to or above the values listed in Attachment B, the operator shall follow all procedures for verification, notification, and restoration according to 30 TAC §§331.105 - 331.106.

CONTINUED on Pages 2 through 14

The permittee is authorized to conduct injection activity in accordance with limitations, requirements, and other conditions set forth herein. This Authorization is granted subject to the provisions of Permit No. UR02827-001. This Authorization is valid until amended or revoked by the Commission, or until revocation of the area permit number UR02827-001.

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For The Commission

- C. Designated Monitor Well and Baseline Well Table (Attachment C)

Routine water quality sampling according to 30 TAC §331.105 is required for all designated monitor wells.
- D. Permit Area Map (Attachments D1, D2, and D3)
- E. Mining and Restoration Schedule (Attachment E)
- F. Plan View of Mine Area (Attachment F)
- G. Baseline Water Quality Table (Attachment G)
- H. The permittee shall maintain in full force and at all times a performance bond or other mechanism of financial assurance, to provide for proper plugging and abandonment of the existing wells associated with this production area authorization (PAA 3) according to 30 TAC §§331.142 - 331.144 and 30 TAC Chapter 37. The financial assurance for any new wells shall be provided at least 60 days prior to the commencement of drilling operations.

IV. Special Provisions:

- A. The permittee shall complete full-scale restoration in PAs 1 and 2, as required by 30 TAC §331.107.
- B. Restoration which started in Well Fields 9 and 10 of PA 3 (see Attachment D2) on August 19, 1999, shall be continued by the permittee in these well fields until restoration is complete or until mining resumes in PA 3. If mining resumes in PA 3, the permittee shall undertake restoration in accordance with 30 TAC §331.107(b) when mining is completed.
- C. To ensure that an adequate cone of depression is being maintained in PA 3, water level measurements shall be taken from each monitor well, concurrent with each water quality sampling of monitor wells required by 30 TAC §331.105. The results of these water level measurements shall be maintained on site and kept readily available for review by TCEQ representatives.
- D. Non-Production Zone Monitor Wells
 - 1. Non-production zone monitor wells shall be completed in the first and second overlying (400' Sand and 250' Sand) and first underlying (AA Sand) aquifers in PA 3. These monitor wells shall be tested for water level fluctuations every three months during injection operations.
 - 2. The procedure to be used in testing for water level fluctuations is subject to approval by the executive director. The results of these water level measurements shall be submitted to the executive director on March 1st, June 1st, September 1st and December 1st of each year.

3. If a monitor well in one of the non-production zone aquifers exhibits water level fluctuations that demonstrate hydrologic communication between the production zone and one of these aquifers, the permittee shall determine if and to what extent leaching solutions are present in affected aquifers, and accomplish clean-up in accordance with 31 TAC Section 331.106. Under such circumstances, corrective action reports shall be submitted monthly to the executive director.
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- E. Prior to the injection of mining fluids, the permittee shall provide to the executive director a copy of a letter from the Department of State Health Services, which states that sufficient financial security for groundwater restoration has been posted with the Department of State Health Services.
 - F. If the permittee does not inject mining solutions in wellfields 11, 12, 13, 14, 15, 16, or 17 for mining in production area 3 by January 1, 2010, the permittee shall install production zone monitor wells within the production area according to the spacing requirements of 30 §331.103(a) to monitor for excursions from the wellfields in production area 3 that have been mined.

**ATTACHMENT A
RESTORATION TABLE**

<u>Parameter</u>	<u>Unit</u>	<u>Concentration</u>
Calcium	mg/l	18
Magnesium	mg/l	6.9
Sodium	mg/l	404
Potassium	mg/l	16
Bicarbonate	mg/l	232
Sulfate	mg/l	364
Chloride	mg/l	289
Nitrate-N	mg/l	0.89
Fluoride	mg/l	0.6
Silica	mg/l	20
TDS	mg/l	1221
Conductivity	µmhos	2017
Alkalinity	Std. Units	191
pH	Std. Units	6 - 9
Arsenic	mg/l	0.009
Cadmium	mg/l	0.0001
Iron	mg/l	0.02
Lead	mg/l	0.003
Manganese	mg/l	0.01
Mercury	mg/l	0.0001
Molybdenum	mg/l	0.33
Selenium	mg/l	0.014
Uranium	mg/l	0.338
Ammonia-N	mg/l	0.18
Radium-226	pCi/l	21.6

ATTACHMENT B

CONTROL PARAMETER UPPER LIMITS TABLE

Production Zone

Control Parameter

Chloride, mg/l	554
Conductivity, μ mhos	3525
Uranium, mg/l	6.54

Non-Production Zone

Control Parameter

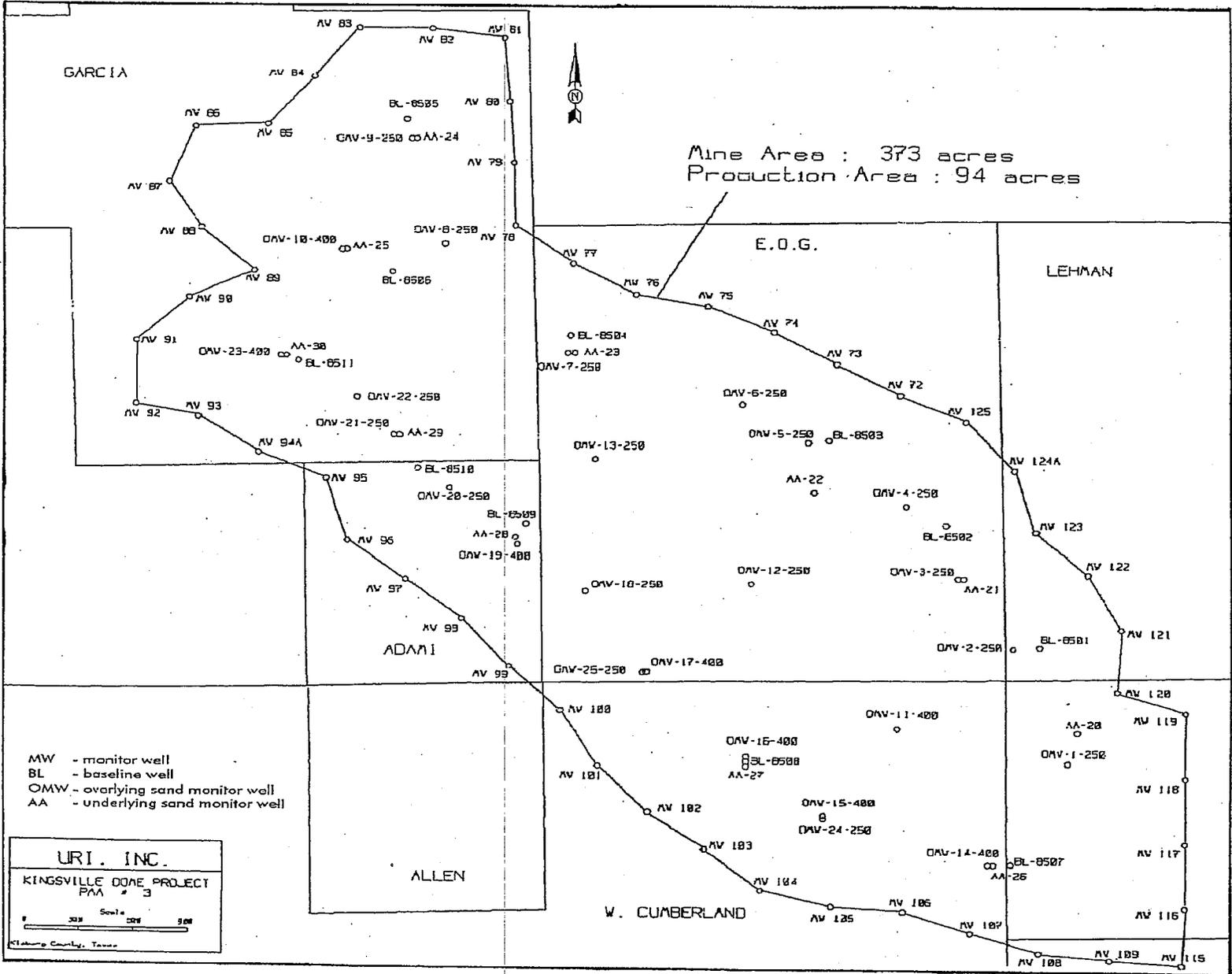
	(250' Sand)	(400' Sand)	(AA Sand)
Chloride, mg/l	836	482.5	666.3
Conductivity, μ mhos	4575	2787.5	4275
Uranium, mg/l	5.041	5.024	5.24

ATTACHMENT C

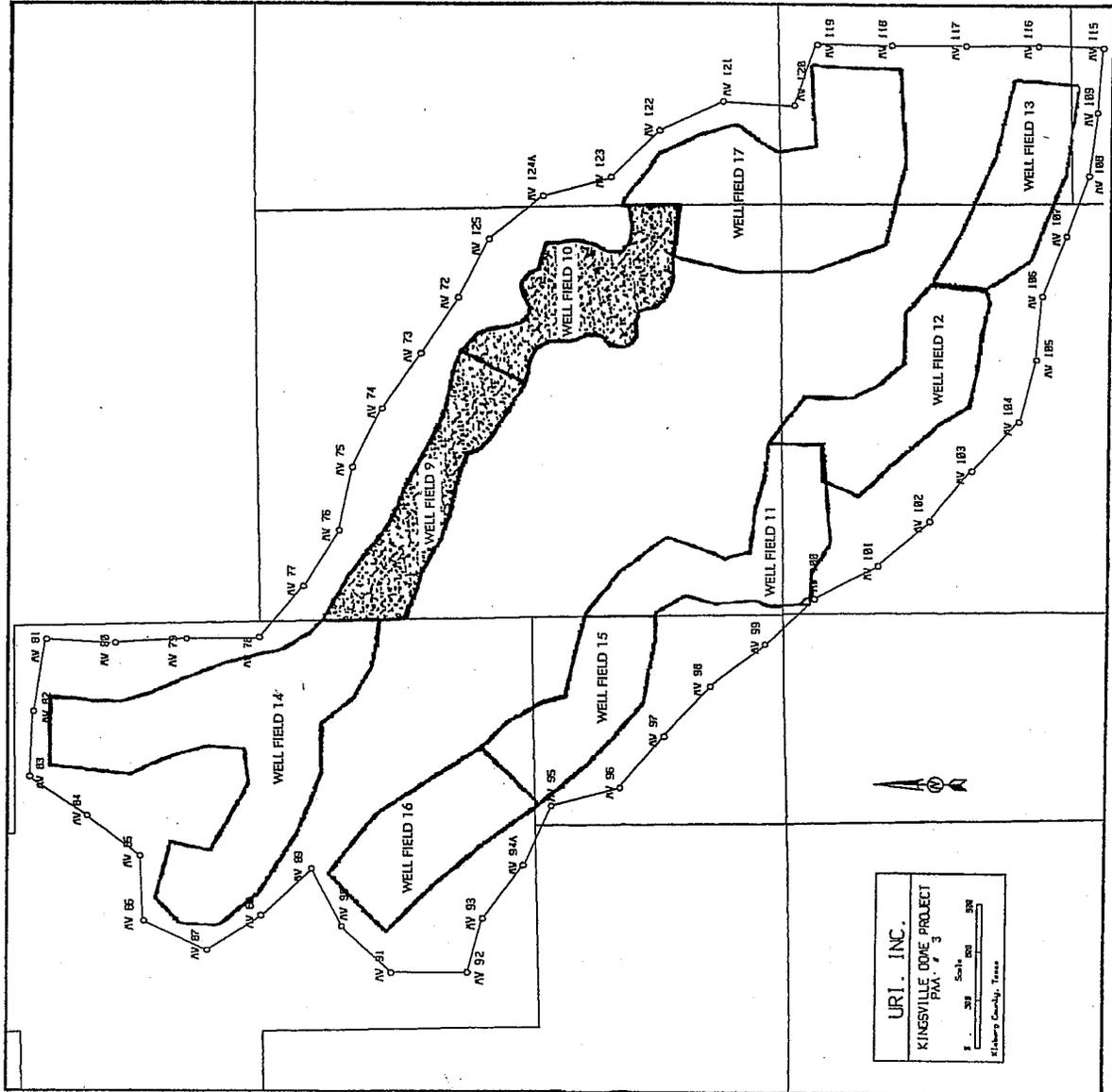
DESIGNATED MONITOR WELL AND BASELINE WELL TABLE

Mine Area	Overlying 250' Sand	Underlying Sand	Baseline Wells	
MW-72	MW-100	OMW-1-250	AA-20	BL-8501
MW-73	MW-101	OMW-2-250	AA-21	BL-8502
MW-74	MW-102	OMW-3-250	AA-22	BL-8503
MW-75	MW-103	OMW-4-250	AA-23	BL-8504
MW-76	MW-104	OMW-5-250	AA-24	BL-8505
MW-77	MW-105	OMW-6-250	AA-25	BL-8506
MW-78	MW-106	OMW-7-250	AA-26	BL-8507
MW-79	MW-107	OMW-8-250	AA-27	BL-8508
MW-80	MW-108	OMW-9-250	AA-28	BL-8509
MW-81	MW-109	OMW-12-250	AA-29	BL-8510
MW-82	MW-115	OMW-13-250	AA-30	BL-8511
MW-83	MW-116	OMW-18-250		
MW-84	MW-117	OMW-20-250		9101
MW-85	MW-118	OMW-21-250		9105
MW-86	MW-119	OMW-22-250		9103
MW-87	MW-120	OMW-24-250		9107
MW-88	MW-121	OMW-25-250		9109
MW-89	MW-122			9111
MW-90	MW-123			9113
MW-91	MW-124-A			9302
MW-92	MW-125			9304
MW-93				9306
MW-94-A				9308
MW-95		Overlying 400' Sand		9310
MW-96				9312
MW-97		OMW-10-400		9314
MW-98		OMW-11-400		9315
MW-99		OMW-14-400		9602
		OMW-15-400		
		OMW-16-400		
		OMW-17-400		
		OMW-19-400		
		OMW-23-400		

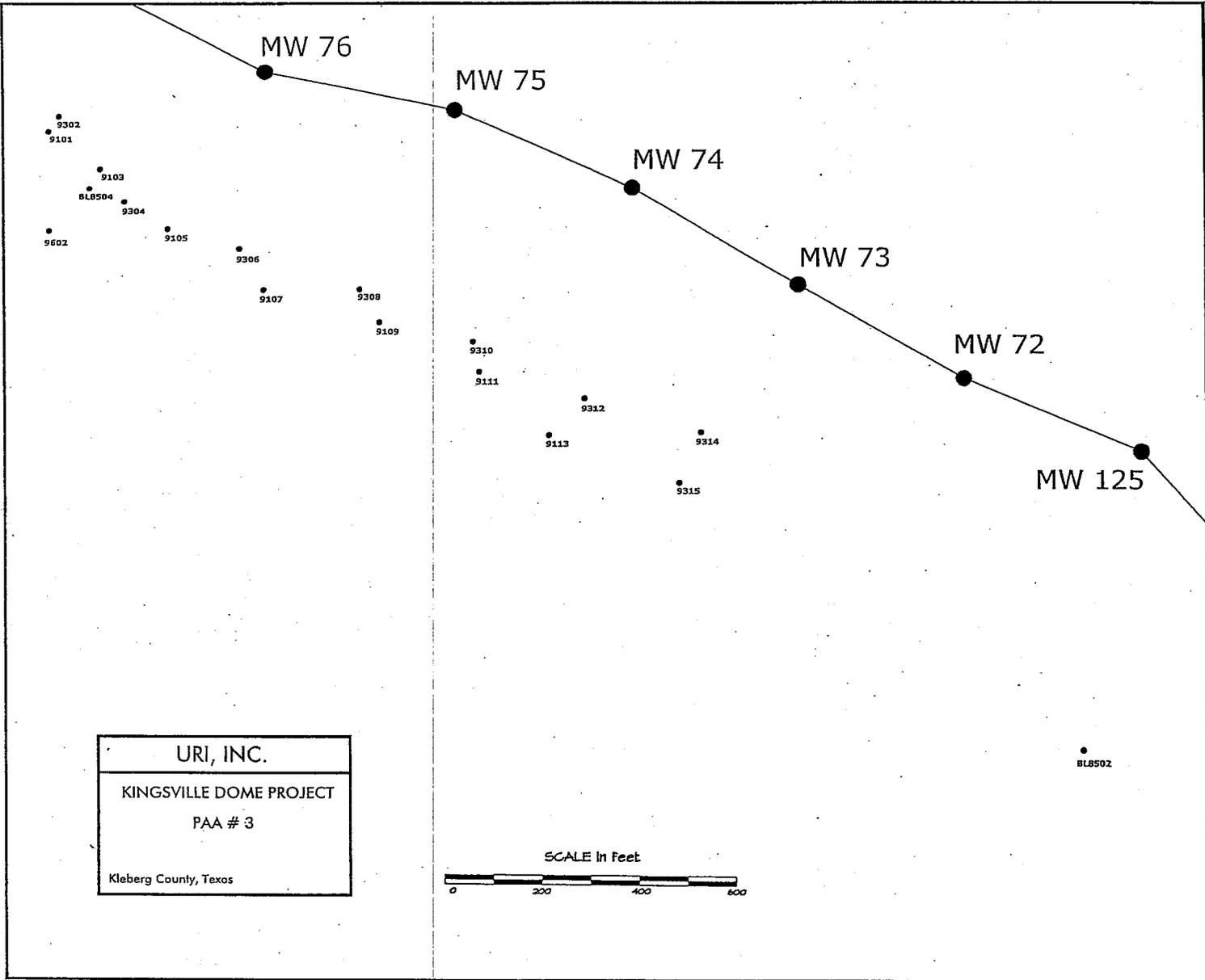
ATTACHMENT D1
 PERMIT AREA MAP



ATTACHMENT D2
PERMIT AREA MAP



ATTACHMENT D3
PERMIT AREA MAP



ATTACHMENT E

MINING AND RESTORATION SCHEDULE

KINGSVILLE DOME - MINE PLAN ESTIMATE																											
DESCRIPTION	YEAR																										
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
PRODUCTION SCHEDULE (INCLUDING STANDBY)																											
PRODUCE																											
PAA#1(WF1-3)	XXXX	XXXX																									
STANDBY			X	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	X																	
PRODUCE																											
PAA#1(WF7)											XX	XXXX	XX														
PAA#2(WF4-8)										XXX	XXXX	XXXX	XX														
PAA#3(WF9-10)											XXX	XX															
STANDBY												XX	XXXX	XXXX	XXXX	XXXX	XXXX	XX									
PRODUCE																											
PAA#1(WF7a)																		XX	XXX								
PAA#2(WF5,6,8)																		XX	XXXX								
PAA#3(WF11-16)																			XXXX	XXXX	XX						
PAA#4																				XX	XXX	XXXX	XX				
PAA#5																					XX	XXXX	XXXX	XX			
RESTORATION SCHEDULE																											
PAA#1											XXX	XXXX	XXXX	XXXX	XX												
PAA#2														XXXX	XXXX	XXXX	XXXX	XXXX	XX								
PAA#3(WF9-10)																				XXXX	XXXX						
PAA#3(WF11-16)																					XX	XXXX	XXXX				
PAA#4																						XXXX	XXXX	XX			
PAA#5																							XXXX	XXXX	XXXX	XX	

ATTACHMENT G

BASELINE WATER QUALITY TABLE

Company: URI, Inc.
 Mine Name: Kingsville Dome
 Mine Area: #3 Production Sand & 250' Sand
 Date Sampled: 5-6/ 1997, 4-6/1998

GROUND WATER ANALYSIS REPORT SUMMARY And
 BASELINE WATER QUALITY - In Situ Mining

PARAMETER	UNIT	NON-PRODUCTION ZONE**			PRODUCTION ZONE						WELL I.D. BY AREA*				
		Low	Average	High	MINE AREA**			PRODUCTION AREA			Non-Prod. Zone	Prod. Zone			
					LOW	Average	High	Low	Average	High		Mine	Product		
1	CALCIUM	mg/l	4	11	16	10	17	34	10	18	33	OMW-1-250	MW-72	BL-8501	9101 ¹
2	MAGNESIUM	mg/l	0.1	5.2	12	1.5	5.9	16	1.8	4	8	OMW-2-250	through	through	9103 ¹
3	SODIUM	mg/l	395	515	776	332	404	525	313	402	480	OMW-3-250	MW-109	BL-8511	9105 ¹
4	POTASSIUM	mg/l	4.2	18.9	123	8.1	10.4	16	7.7	16	31	OMW-4-250			9107 ¹
5	CARBONATE	mg/l	0	27	96	0	0	5	0	18	49	OMW-5-250	MW-115		9109 ¹
6	BICARBONATE	mg/l	107	349	472	113	232	298	110	168	321	OMW-6-250	through		9111 ¹
7	SULFATE	mg/l	27	179	517	199	351	557	183	364	487	OMW-7-250	MW-125		9113 ¹
8	CHLORIDE	mg/l	308	459	669	214	282	443	216	289	362	OMW-8-250			9302 ¹
9	NITRATE	mg/l	0	0.02	0.28	0	0.89	3.8	0.01	0.19	2.1	OMW-9-250			9304 ¹
10	FLUORIDE	mg/l	0.59	1.31	1.8	0.47	0.59	0.77	0.49	0.6	0.8				9306 ¹
11	SILICA	mg/l	14	17	26	15	19	22	17	20	23				9308 ¹
12	TDS(180)	mg/l	1060	1411	2180	917	1221	1570	904	1188	1440	OMW-12-250			9310 ¹
13	EC(25C)	uMhos	1910	2466	3660	1600	2017	2590	1590	1867	2820	OMW-13-250			9312 ¹
14	ALKALINITY	Std. Units	134	332	482	93	191	244	108	164	263	OMW-18-250			9314 ¹
15	PH	Std. Units	7.59	8.67	9.44	7.3	8.09	8.44	7.69	8.70	9.57	OMW-20-250			9315 ¹
16	ARSENIC	mg/l	<0.0001	0.001	0.01	<0.0001	0.006	0.029	0.003	0.009	0.025	OMW-21-250			9802 ¹
17	CADMIUM	mg/l	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0001	OMW-22-250			
18	IRON	mg/l	<0.01	0.01	0.06	<.01	0.02	0.13	<.01	0.02	0.04	OMW-24-250			
19	LEAD	mg/l	<0.0001	0.001	0.007	<0.0001	0.003	0.034	<0.001	<0.001	<0.001	OMW-25-250			
20	MANGANESE	mg/l	<0.01	0.01	0.01	<0.01	0.01	0.07	<0.01	0.01	0.01	OMW-26-250			
21	MERCURY	mg/l	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001				
22	MOLYBDENUM	mg/l	<0.01	0.08	1.3	<0.01	0.23	3.5	0.02	0.33	3.2				
23	SELENIUM	mg/l	<0.001	0.0001	0.002	<0.001	0.009	0.049	<0.001	0.014	0.063				
24	URANIUM	mg/l	0.015	0.023	0.041	0	0.041	0.187	0.019	0.338	1.54				
25	AMMONIA	mg/l	<0.01	0.09	0.38	<0.01	0.04	0.27	<0.01	0.18	0.4				
26	RA226	pCi/l	0.1	0.3	0.6	0.1	4.6	72	0.3	21.6	51				

*LIST THE IDENTIFICATION NUMBERS OF WELLS USED TO OBTAIN THE LOW, AVERAGE AND HIGH VALUES. **MONITOR WELLS
¹sampled for Uranium, Radium 226, Molybdenum and EC only

ROUND WATER ANALYSIS REPORT SUMMARY And
 BASELINE WATER QUALITY - In Situ Mining

Company: URI, Inc.
 Mine Name: Kingsville Dome
 Mine Area: #3
 Date Summarized: 6-20-97

BASELINE WATER QUALITY TABLE (Continued)

ATTACHMENT G

PARAMETER	UNIT	NON-PRODUCTION ZONE**			PRODUCTION ZONE						WELL I.D. BY AREA*			
		Low	Average	High	MINE AREA**			PRODUCTION AREA			Non-Prod. Zone	Prod. Zone		
					Low	Average	High	Low	Average	High		Mine	Product.	
1	CALCIUM	mg/l	4	10	20							OMW-10-400		
2	MAGNESIUM	mg/l	3.1	4.4	6.0							OMW-11-400		
3	SODIUM	mg/l	408	429	458							OMW-14-400		
4	POTASSIUM	mg/l	4.4	6.0	9.1							OMW-15-400		
5	CARBONATE	mg/l	0	0	0							OMW-16-400		
6	BICARBONATE	mg/l	211	328	398							OMW-17-400		
7	SULFATE	mg/l	86	182	363							OMW-19-400		
8	CHLORIDE	mg/l	328	358	386							OMW-23-400		
9	NITRATE	mg/l	0.00	0.01	0.03									
10	FLUORIDE	mg/l	0.77	1.48	1.80									
11	SILICA	mg/l	13	16	20									
12	TDS(180)	mg/l	1090	1168	1320									
13	EC(25C)	uMhos	1920	2037	2230									
14	ALKALINITY	Std. Units	173	269	326									
15	PH	Std. Units	7.56	7.75	8.02									
16	ARSENIC	mg/l	0.000	0.001	0.002									
17	CADMIUM	mg/l	0.0000	0.0000	0.0000									
18	IRON	mg/l	0.01	0.04	0.14									
19	LEAD	mg/l	0.000	0.001	0.003									
20	MANGANESE	mg/l	0.00	0.00	0.01									
21	MERCURY	mg/l	0.0000	0.0000	0.0000									
22	MOLYBDENUM	mg/l	0.00	0.01	0.02									
23	SELENIUM	mg/l	0.000	0.000	0.000									
24	URANIUM	mg/l	0.000	0.014	0.024									
25	AMMONIA	mg/l	0.00	0.07	0.19									
26	RA226	pCi/l	0.1	0.3	0.8									

* LIST THE IDENTIFICATION NUMBERS OF WELLS USED TO OBTAIN THE LOW, AVERAGE AND HIGH VALUES. ** MONITOR WELLS.

GROUND WATER ANALYSIS REPORT SUMMARY and
BASELINE WATER QUALITY - In Situ Mining

Company: URI, Inc.
 Mine Name: Kingsville Dome
 Mine Area: #3
 Date Sampled: 6-97 Underlying sand

URI, Inc.
 Production Area Authorization No. 3
 UR02827-031

BASELINE WATER QUALITY TABLE (Continued)

ATTACHMENT G

	PARAMETER	UNIT	NON-PRODUCTION ZONE**			PRODUCTION ZONE						WELL I.D. BY AREA*		
						MINE AREA**			PRODUCTION AREA			Non-Prod. Zone	Prod. Zone	
			Low	Average	High	Low	Average	High	Low	Average	High		Mine	Product.
1	CALCIUM	mg/l	17	34	41							AA-20		
2	MAGNESIUM	mg/l	0.09	104	16							AA-21		
3	SODIUM	mg/l	503	579	685							AA-22		
4	POTASSIUM	mg/l	8.1	12	19							AA-23		
5	CARBONATE	mg/l	0	0	0							AA-24		
6	BICARBONATE	mg/l	98	165	187							AA-25		
7	SULFATE	mg/l	615	659	768							AA-26		
8	CHLORIDE	mg/l	361	416	533							AA-27		
9	NITRATE	mg/l	0.00	0.01	0.04							AA-28		
10	FLUORIDE	mg/l	0.43	0.54	.074							AA-29		
11	SILICA	mg/l	2	19	59							AA-30		
12	TDS (180°)	mg/l	1650	1801	2140									
13	EC (25° C)	µMhos	2660	2856	3420									
14	ALKALINITY	Std. Units	80	135	153									
15	pH	Std. Units	7.61	8.07	8.24									
16	ARSENIC	mg/l	0.000	0.003	0.011									
17	CADMIUM	mg/l	0.0000	0.0000	0.0003									
18	IRON	mg/l	0.00	0.03	0.20									
19	LEAD	mg/l	0.000	0.000	0.001									
20	MANGANESE	mg/l	0.00	0.00	0.02									
21	MERCURY	mg/l	0.0000	0.0000	0.0000									
22	MOLYBDENUM	mg/l	0.02	0.04	0.06									
23	SELENIUM	mg/l	0.000	0.001	0.005									
24	URANIUM	mg/l	0.014	0.056	0.211									
25	AMMONIA	mg/l	0.00	0.07	0.2									
26	RADIUM 226	pCi/l	0.10	0.39	0.9									

* LIST THE IDENTIFICATION NUMBERS OF WELLS USED TO OBTAIN THE LOW, AVERAGE AND HIGH VALUES. ** MONITOR WELLS